AD)	

GRANT NUMBER DAMD17-96-1-6071

TITLE: Racial and Ethnic Differences in Breast Cancer Risk Factors

PRINCIPAL INVESTIGATION: Esther M. John, Ph.D.

CONTRACTING ORGANIZATION: Northern California Cancer Center Union City, California 94587-6500

REPORT DATE: July 1998

TYPE OF REPORT: Annual

PREPARED FOR: Commander

U.S. Army Medical Research and Materiel Command Fort Detrick, Frederick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release;

distribution unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.



REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 2050a.

		•			
1. AGENCY USE ONLY (Leave blace	nk) 2. REPORT DATE July 1998	3. REPORT TYPE AND	D DATES COVERED 97 - 30 Jun 98)		
4. TITLE AND SUBTITLE	Toury 1990	Annual (1 bul	5. FUNDING NUMBERS		
Racial and Ethnic Dif	ferences in Breast C	ancer Risk	3. TOTALING NOWIBERS		
Factors	DAMD17-96-1-6071				
	•		i .		
6. AUTHOR(S)			1		
Esther M. John, Ph.D	•				
 PERFORMING ORGANIZATION Northern California C 			8. PERFORMING ORGANIZATION REPORT NUMBER		
Union City, Californi			NEFORT WOMBER		
	u 3130, 0300				
•					
9. SPONSORING/MONITORING ACC	BENCY NAME(S) AND ADDRESS	(ES)	10. SPONSORING/MONITORING		
U.S. Army Medical Res	earch and Materiel C	ommand	AGENCY REPORT NUMBER		
Fort Detrick, Frederi		Ollinaria			
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION / AVAILABILI	TV STATEMENT	· · · · · · · · · · · · · · · · · · ·	12b. DISTRIBUTION CODE		
TELL SIGNIFICATION, AVAILABLE	TT OTATEMENT		128. DISTRIBUTION CODE		
Approved for public r	elease; distribution	unlimited			
	•				
13. ABSTRACT (Maximum 200					
,	onulation-based case-c	ontrol study of breast	cancer conducted in the		
San Francisco Bay A	rea has been on-going s	since July 1996. Case	es include African-		
American and white v	vomen aged 35-79 years	s and diagnosed with	breast cancer between		
1995 and 1998. Cont	rols are identified through	h random-digit dialine	g. Information on physical		
activity, sunlight expo	sure, dietary intake of vi	tamin D and phytoes	trogens, and other risk		
factors, is collected by	y in-person interview. Th	e home visit also inc	ludes measurements of		
anthropometry and sk	kin pigmentation using a	Chromameter. To da	ate, 337 case and 383		
control interviews hav	re been completed. Data	from this study will b	pe pooled with the data		
collected in two on-go	ing case-control studies	in African-American,	Latina, and white women		
that use the same me	thodology and question	naire. The combined	data for an estimated		
1340 cases and 1600	controls will allow us to	examine the risk fac	tor profile among white		
(nigh risk), African-An	nerican (moderate risk),	and Latina (low risk)	women. This study will		
factors in African Ame	ontribution to the sparse erican and Latina womer	epidemiologic literatu	re on breast cancer risk		
lactors in Amean-Ame	incan and Latina womer	1.			
14. SUBJECT TERMS Breast	Cancer		15. NUMBER OF PAGES		
4	88				
			16. PRICE CODE		
17. SECURITY CLASSIFICATION	18. SECURITY CLASSIFICATIO	N 19. SECURITY CLASSIF	ICATION 20. LIMITATION OF ABSTRAC		
OF REPORT	OF THIS PAGE	OF ABSTRACT	and the state of t		
Unclassified	Unclassified	Unclassified	Imlimited		

FOREWORD

Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the U.S. Army.
Where copyrighted material is quoted, permission has been obtained to use such material.
Where material from documents designated for limited distribution is quoted, permission has been obtained to use the material.
Citations of commercial organizations and trade names in this report do not constitute an official Department of Army endorsement or approval of the products or services of these organizations.
In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and use of Laboratory Animals of the Institute of Laboratory Resources, national Research Council (NIH Publication No. 86-23, Revised 1985).
$\ell\gamma$ For the protection of human subjects, the investigator(s) addresed to policies of applicable Federal Law 45 CFR 46.
In conducting research utilizing recombinant DNA technology, the investigator(s) adhered to current guidelines promulgated by the National Institutes of Health.
In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.
In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.

MMM 7-24-95
PI - Signature Date

TABLE OF CONTENTS

	Page
1. INTRODUCTION	5
1.1. Background	5
1.2. Purpose of On-going Research	5
2. BODY	6
2.1. Research Materials and Methods	6
2.1.1. Study Population	6
2.1.2. Data Collection Procedures	6
2.1.3. Data Management	7
2.1.4. Quality Control	7
2.2. Results	7
2.2.1. Completed Field Work	7
2.2.2. Revised Work Scope	8
2.2.3. Completed Interviews vs. Revised Work Scope	8
2.2.4. Reliability Study	9
3. CONCLUSIONS	9
4 LITERATURE CITED	a

1. INTRODUCTION

1.1. Background

Breast cancer incidence rates in the San Francisco Bay Area are among the highest in the world [1]. In 1994, breast cancer affected 125.1 per 100,000 white women, the racial-ethnic group with the highest incidence rate, and as the leading incident cancer in women accounted for 33% of all cancers diagnosed in women [2]. Although incidence rates (per 100,000) are lower in African-Americans (96.3), Latinas (74.3), and Asians (68.0), breast cancer is the leading cancer in these populations as well [2].

The pronounced racial-ethnic differences in breast cancer incidence between Latinas, African-Americans, and white women remain largely unexplained for several reasons: (1) Few analytic studies with an etiologic focus have been conducted in Latina and African-American populations [3-11]; (2) few breast cancer studies included non-white populations that were large enough for separate analysis and racial-ethnic comparisons of risk factors [5,7,8]; and (3) in the few studies that included African-American women only [3,4,6,9-11], the comparison of risk factors with those of other racial-ethnic groups is limited by differences in methodology and data collection instruments used in different studies. It therefore is not known to what extent the differences in incidence rates are attributable to racial/ethnic differences in (1) the magnitude of relative risks associated with known and suspected risk factors, (2) the prevalence of known and suspected risk factors, (3) the magnitude of relative risks and/or prevalence of risk factors yet to be identified, and (4) genetic susceptibility.

1.2. Purpose of On-going Research

The San Francisco Bay Area offers a unique opportunity to conduct etiologic research in a multiracial/ethnic population given the large number of breast cancer cases diagnosed each year, 25% of whom are non-white. The on-going population-based case-control study funded by DOD is collecting interview data for African-American and white breast cancer cases and population controls. It uses the same protocol and data collection instruments as two complementary case-control studies conducted by the Principal Investigators: an on-going case-control study of breast cancer in Latina women (funded by the National Cancer Institute) which will complete data collection in the summer 1999 (PI: Dr. Esther M. John), and a case-control study of breast cancer in Latina, African-American, and white women over age 50 years (funded by the California Breast Cancer Research Program) which completed data collection in the spring of 1998 and is currently conducting data analyses (PI: Dr. Pamela Horn-Ross). The three studies are administered as one single case-control study, and the data from the three studies will be pooled for the DOD-funded analyses described below.

The purpose of the on-going study is to collect interview data on a broad array of known, suspected, and newly hypothesized factors, with the ultimate goal of pooling the data from the three case-control studies. The pooled data will allow us to examine racial/ethnic differences in breast cancer risk factors in a large multiracial/ethnic population from a single geographic area. This research will make a significant contribution to the lack of knowledge about the etiology of breast cancer in non-white populations and will help elucidate the reasons for the striking racial/ethnic differences in breast cancer incidence.

2. BODY

2.1. Research Materials and Methods

2.1.1. Study Population

<u>Cases</u> include women meeting the following eligibility criteria: (1) newly diagnosed with histologically confirmed, primary invasive breast cancer; (2) no previous history of *in-situ* or invasive breast cancer; (3) African-American or white (based on self-identification), aged 35-49 years at diagnosis, and diagnosed between April 1, 1995 and April 30, 1998; (4) African-American or white (based on self-identification) aged 50-79 years at diagnosis, and diagnosed between April 1, 1995 and June 30, 1995 or between November 1, 1996 and April 30, 1998; (5) alive at the time of contact; (6) residing in Alameda, Contra Costa, San Francisco, San Mateo, or Santa Clara counties, California, at the time of diagnosis.

African-American and white breast cancer cases aged 50 years and over diagnosed between July 1, 1995 and October 31, 1996 are included in the case-control study by Dr. Horn-Ross.

Women with newly diagnosed breast cancer are identified through the two population-based cancer registries operated by the Northern California Cancer Center. Confidential information on newly diagnosed breast cancer cases is obtained from the registries about every 6 weeks. Based on recent registry data, we anticipate that 455 African-American and 4,550 white breast cancer patients will be eligible for the on-going study. All African-American women and a 10% random sample of white women are invited to participate in the interview. After excluding cases who are deceased or have a personal history of breast cancer, interviews are expected to be completed for 570 cases (260 blacks and 310 whites) funded by the DOD.

<u>Controls</u> include a probability sample of women who meet the following criteria: (1) No previous history of breast cancer; (2) alive and between the ages of 35 and 79 years at the time of selection into the study; (3) residing in Alameda, Contra Costa, San Francisco, San Mateo, or Santa Clara counties, California, at the time of selection into the study; (4) African-American or white based on self-identification.

Controls are identified through random-digit-dialing (RDD). A bank of 70,000 random numbers has been established for the three case-control studies. The random numbers are called by four telephone specialists in monthly waves of 2,500 numbers. After completion of each wave, controls are randomly selected into the study from the pool of eligibles. Controls are frequency-matched to cases by race (African-American, white) and five-year age group (35-39, 75-79). Equal number of case and control interviews will be completed.

2.1.2. Data collection procedures

Data collection is performed by experienced professional interviewers and involves a brief screening interview administered over the telephone and an in-person interview usually administered at the participant's home. The screening interview inquires about current age, racial/ethnic background, adoption status, Jewish heritage, personal history of breast or ovarian cancer, and history of cancer in first-degree relatives (see Appendix A). The in-home interview involves the administration of the consent form, a structured questionnaire, and the

measurement of weight, height, waist and hip circumference, and skin pigmentation using a Minolta Chromameter. The questionnaire inquires about demographic background, physical activity, sunlight exposure, diet, supplement intake, anthropometry, residential history, occupational history, pregnancy history, menstrual history, hormone use, and medical history (see Appendix B)

The interview and measurements take 2 to 21/2 hours to administer for most participants.

To ensure that we achieve satisfying response rates given the lengthy home interview, we started a compensation program in July 1997 which has been well received. All study participants are offered \$25.00 for their time and effort in completing the home interview.

2.1.3. Data management

Progress in RDD and data collection (e.g., screening, in-person interview, measurements) is monitored through two computerized FOXPRO tracking systems. Data entry of screening and questionnaire data is also performed through FOXPRO data entry screens.

2.1.4. Quality control

Several quality control procedures have been implemented to ensure the collection of high quality data. (1) Each completed questionnaire is edited by the interviewer immediately following the interview. (2) Each edited questionnaire is reviewed by the Program Manager. Missing data items and obvious error and inconsistencies in answers are identified and clarified by re-contacting the study participant. (3) Each interviewer is observed by the Program Manager while conducting an interview in the field. A report on the observation is prepared and discussed with the interviewer. (4) Interviewers meet every two weeks with the Program Manager to discuss progress and quality of the completed work. (5) Interviewers participate in quarterly staff meetings, or more often as needed, to discuss specific issues arising in the field (e.g., refusals, no-shows, home visits, organization of work load, incentives, etc) and to participate in refresher sessions on specific questionnaire items and measurements. (6) Equipment (i.e., scales, chromameters) is periodically calibrated by office staff. (7) A sample of study participants is being re-contacted and questioned about specific sections of the questionnaire (see below on reliability study). (7) Data entry is on-going and is done twice to easily identify data entry errors.

2.2. Results

Data collection for the DOD component of the on-going case-control study has been ongoing since July 1996 and is expected to be completed by the Fall of 1999. Statistical analyses will be conducted upon completion of data collection and data entry.

2.2.1. Completed Field Work

<u>Cases</u>: As of June 16, 1998, 3,774 newly diagnosed breast cancer cases have been reported to the cancer registry who were listed as African-American or white and who have been diagnosed during the ascertainment period of the DOD component described above. The study population includes a 10% random sample of white cases and all African-American cases. To date, 827 cases have identified and selected. Of these, 195 did not meet the eligibility criteria and were therefore excluded from the study population: 37 had a prior diagnosis of breast cancer, 32 cases were deceased at the time of contact, 3 cases did not speak sufficient English

to complete the home interview, and 118 did not identify themselves as African-American or white. As required by the cancer registries, the physicians of potentially eligible patients were contacted before inviting them to participate in the study. Contraindications were given for 10 patients who subsequently were not contacted.

Of the remaining 629 cases eligible for the home interview, 194 are currently pending in the field (35 pending physician approval, 144 pending screening, and 15 pending the home interview). Of the remaining 435 cases, 382 (88%) completed the telephone screening interview and 337 (78%) completed the home interview and measurements (including 178 African-American and 159 white cases).

<u>Controls</u>: To date, 59,200 random telephone numbers have been closed out and screened for eligible population controls for the three on-going studies. From the pool of eligibles, 760 controls (whites and African-Americans aged 35-79) were selected into the DOD study. Of these, 38 did not meet the eligibility criteria and were therefore excluded from the study population: 25 had prior breast cancer, 7 did not self-identify themselves as African-American or white, 4 did not speak sufficient English to complete the home interview, and 2 were deceased at the time of recruitment. Of the remaining 722 eligible controls, 185 are currently pending in the field (171 pending screening, 14 pending the home interview). Of the remaining 537 eligible controls, 464 (87%) completed the screening interview, and 383 (71%) completed the home interview and measurements (including 199 African-Americans and 184 whites).

2.2.2. Revised Work Scope

We recently reviewed our original estimates of case accrual and interview completion rates with our actual field experience and revised the work scope accordingly. Our case accrual rates agree with our original estimates. The number of cases meeting the eligibility criteria (i.e., no history of breast cancer, alive at the time of contact) is slightly lower than originally estimated, as are the response rates. For the 3 studies combined, we had originally estimated to collect interview data for 480 African-American, 540 white, and 630 Latina cases and equal numbers of controls. Based on our actual field experience, we now project to complete home interviews with 380 African-American and 455 white cases and equal numbers of controls, and 505 Latina cases and 760 Latina controls (1.5 controls per case among Latinas only), or a total of 2,935 participants. Of these, 260 African-American and 310 white cases and equal numbers of controls will be completed as part of the DOD-funded study.

2.2.3. Completed Interviews vs. Revised Work Scope

According to the revised work scope for the DOD study, we are 68% done for African-American cases (178 of 260), and 51% done for white cases (159 of 310). With regard to controls, we are 77% done for African-Americans (199 of 260) and 59% done for whites (184 of 310). The remaining interviews will be completed in year 3 and the early part of year 4 of the project.

One of the goals of this project is to combine the data collected from the 3 on-going case-control studies for statistical analysis. Across the 3 studies we have completed home interviews with a total of 873 cases (271 African-Americans, 325 Latinas, and 277 whites) and 1,027 controls (300 African-Americans, 424 Latinas, and 303 whites). We therefore have

completed 65% (1,900 of 2,935) of the projected work load. The remaining data will be collected by the Fall of 1999.

2.2.4. Reliability Study

A reliability study was planned and implemented in year 2. A sample of study participants is being re-contacted and asked a set of questions included in the original questionnaire. The reliability study is focused on the questions contained in the sections on physical activity, sunlight exposure, and occupational history which deal with the major hypotheses of this study.

3. CONCLUSIONS

All components of data collection have been launched and are conducted by an extraordinary professional team of office and field staff that is highly motivated, experienced, and productive. Data collection is progressing according to schedule and will be completed by the Fall of 1999 according to the originally proposed time line.

4. LITERATURE CITED

- 1. Miller BA, Ries LAG, Hankey BF, et al. (eds). Cancer Statistics Review: 1973-1989, National Cancer Institute. NIH Pub. No. 92-2789, 1992.
- 2. Prehn AW, Leung, Davis MM, et al. Cancer incidence in the San Francisco Bay Area, 1988-1994. Union City, CA:Northern California Cancer Center, 1997.
- 3. Palmer JR, Rosenberg L, Rao RS, et al. Oral contraceptive use and breast cancer risk among African-American women. Cancer Causes and Control 1995;6:321-31.
- 4. Palmer JR, Rosenberg L, Harlap S. et al. Adult height and risk of breast cancer among US black women. Am J Epidemiol 1995;141:845-9.
- 5. Brinton LA, Daling JR, Liff JM, et al. Oral contraceptives and breast cancer risk among younger women. J Natl Cancer Inst 1995;87:827-35.
- 6. Mayberry RM. Age-specific patterns of association between breast cancer and risk factors in black women, ages 20 to 39 and 40 to 54. Ann Epidemiol 1994;4:205-13.
- 7. Krieger N, Wolff MS, Hiatt RA, et al. Breast cancer and serum organochlorines: a prospoective study among white, black, and Asian women. J Natl Cancer Inst 1994;86:589-99.
- 8. Mayberry RM, Stoddard-Wright C. Breast cancer risk factors among black women and white women: Similarities and differences. Am J Epidemiol 1992;136:1445-56.
- 9. Amos CI, Goldstein AM, Harris EL. Familiality of breast cancer and socioeconomic status in blacks. Cancer Res 1991;51:1793-97.

- 10. Schatzkin A, Palmer JR, Rosenberg L, et al. Risk factors for breast cancer in black women. J Natl Cancer Inst 1987;78:213-17.
- 11. Austin H, Cole P, Wynder E. Breast cancer in black American women. Int J Cancer 1979;24:541-44.

APPENDIX A CASE SCREENING INTERVIEW

CASE

SCREENING INTERVIEW
Date Screener Completed Study ID
Hello, my name is,I'm Calling from the Northern California Cancer Center. May I speak to (NAME OF CASE WOMAN)?
IF CASE WOMAN ANSWERS THE PHONE:
We recently sent you an invitation to participate in a project on women's health. Have you received our invitation?
IF SHE HAS RECEIVED THE LETTER:
As you may recall, the letter said we would be calling to ask you a few questions and to answer any questions you might have. We have several ongoing breast cancer projects.
IE QUE UAS NOT DECEIVED OF NOT DEAD THE LETTER.

IF SHE HAS <u>NOT</u> RECEIVED OR <u>NOT</u> READ THE LETTER:

Our center has several projects to increase our knowledge about women's health. We are looking for ways to prevent breast cancer. We are interviewing women in the San Francisco Bay Area who have had breast cancer, as well as women who have not.

To determine which project you may be eligible for, I would like to ask you a few questions. This should take only 5 minutes.

Before we get started, I want to remind you that your participation is voluntary, and there are no consequences if you decide not to participate. At any time you may decide not to participate in the project, or choose not to answer certain questions. The information you provide will be kept confidential. Before we begin, do you have any questions?

ANSWER ANY QUESTIONS.

May I begin with the first question? Yes No

G:\screener.doc

Let m	e start with the first ques	ition:
Q1.	How old were you on yo	ur last birthday?
Q2.		ategories best describes your racial/ethnic DICES, RECORD UP TO TWO)
	Hispanic or Latina African-American or Blac White OTHER(specify)	
	INTERVIEWER: DO NOT READ, F	OR CODING ONLY
	AFRICAN AMERICAN OR BLA NATIVE AMERICAN	
Q3.	Were you adopted?	
	YES NO DK	1 (GO TO Q3A.) 2 (GO TO Q4.) 9 (GO TO Q4.)
	Q3A. Do you know anyt	thing about your biological family?
	YES NO	1 (GO TO Q4.) 2 (GO TO Q6.)
Q4.	Were any of your four gr	andparents of Jewish heritage?
	YES NO DK	1 2 (GO TO Q6.) 9 (GO TO Q6.)
	IF YE	<u>s</u> :
	Q5.	How many of your grandparents were of Jewish heritage?

Q6.	Have you (e	ever) had breast cancer?
	YES NO DK	1 (GO TO Q7.) 2 (GO TO Q10.) 9 (GO TO Q10.)
Q7.	Was it in on	ne or both breasts?
	ONE BOTH DK	1 (GO TO Q10.) Η 2 (GO TO Q8.) 9 (GO TO Q10.)
	Ω8.	How old were you when your first breast cancer was diagnosed?
	Q9 .	In what month and year were you first 19 diagnosed? MONTH YEAR
		SED BEFORE APRIL 1995, COMPLETE SCREENER, BUT DON'T SCHEDULE ITACT OFFICE IMMEDIATELY.
Q10.	Have you ev	ver had ovarian cancer?
	YES NO DK	1 2 9
Q11.	Did you hav	re any type of cancer diagnosed before you were 20?
	YES NO DK	1 2 9
IF AD	OPTED, AND	DOESN'T KNOW ABOUT BIOLOGICAL FAMILY,

GO TO Q15. AND ASK ABOUT DAUGHTERS, THEN GO TO Q19. AND ASK ABOUT SONS.

OTHERWISE CONTINUE.

Now I would like to ask you about whether certain of your blood relatives, living or deceased, have had breast cancer, ovarian cancer, or any type of childhood cancer.

			IF YES: Q13. What kind of cancer did she have? Q14. How old was she when she was		
Q12. Has your mother ever had breast cancer, ovarian cancer, or any type of childhood cancer diagnosed before the age of 20?	YES NO DK	1 → 2 9	BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)		
How about any of your <u>sisters</u> ?	YES NO DK NO SIST	1→ 2 9 8	SISTER #1 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)		
			SISTER #2 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)		
			SISTER #3 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)		
ASK ALL Q15. Have any of your daughters ever had breast cancer, ovarian cancer, or any type of childhood cancer before the age of 20?	YES NO DK NO DAUG	1→ 2 9 8	DAUGHTER #1 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)		
			DAUGHTER #2 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)		

			IF YES: Q17. What kind of cancer did he have? Q18. How old was he when he was fir diagnosed with this cancer?			
Q16. Has your <u>father</u> ever had breast cancer, <u>or</u> any type of childhood cancer diagnosed before the age of 20 ?	YES NO DK	1 → 2 9	BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)			
How about any of your <u>brothers</u> ?	YES NO DK NO BROTH	1 → 2 9 8	BROTHER #1 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)			
			BROTHER #2 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)			
			BROTHER #3 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)			
ASK ALL Q19. Have any of your sons had breast cancer, or any type of childhood cancer diagnosed before age of 20?	YES NO DK NO SONS the	1→ 2 9 8	SON #1 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)			
			SON #2 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)			

IF PARTICIPANT REPORTS OTHER CANCERS AND/OR OTHER RELATIVES WITH CANCER, R

TYPE OF RELATIVE	TYPE OF CANCER	AGE AT DIAGNOSIS
1		
2		
3		
4.		

INTERVIEW SET-UP

ARRANGE AN IN-HOME INTERVIEW FOR PARTICIPANTS WHO CONSIDERINGEMISELVES: AFRICAN-AMERICAN WHITE WITH A SELECTION NUMBER OF 0 (ZERO)

These are all the questions I have for you today. I would like to thank you very much for answering these questions. Now I would like to invite you to participate in one of our studies which will involve an interview with you in person. We would like to do this in your home at a time which is convenient for you. The interview may take about 2 hours, depending on how much you have to say. We will compensa you \$25.00 for your time and effort. The questionnaire will cover lifestyle factors such as exercise, nutrition, work history, and other activities.

How about? (SUGGEST AN AVAILABLE TIME) Is this a good time for you	?
Let me confirm your address. Do you still live at (CONFIRM ADDRESS)?	
NEW ADDRESS:	
Is there any apartment number?	
Could you please give me directions to your home?	
If you can not make our appointment, would you please call the office at (510) 429-2527. If you prefer, you may call collect between 8:30 a.m. and 5:00 p.m. at (510) 429-2500.	
Thank you again for your time and interest in this study. I will be taking some measurements and it would be very helpful if you would wear light clothing with short sleeves. I am looking forward to meeting you on (CONFIRM APPOINTM DATE).	IEN

CLOSE THE SCREENING INTERVIEW WITH PARTICIPANTS WHO CONSIDER WHETE ELVES: WITH A SELECTION NUMBER OF 1-9 ASIAN OR OTHER

These are all the questions I have for you today. I would like to thank you very much for answering these questions. If you should prove to be eligible for one of our studies, we will contact you again soon. Thanks again for your help.

APPENDIX B QUESTIONNAIRE

		·		
PARTICIPANT ID	:			

BAY AREA WOMEN'S HEALTH STUDY

REFERENCE YEAR 19					
IF PARTICIPANT IS LATINA, AS	K:	. :			
Do you prefer to be inte	rviewed in English or	Spanish?			
QUESTIONNAIRE PREFE		ENGLISH SPANISH NO PREFERENCE	1 2 3		
IF NO PREFERENCE:		ENDS IN 0,2,4,6 or 8 USE E ENDS IN 1,3,5,7 OR 9 USE			RSION
QUESTIONNAIRE USED:		ENGLISH SPANISH	1 2	•	
INTERVIEWER:					
DATE OF INTERVIEW:		MO DAY YEAR			
•		Anthro. Measurement	Y	N	
		Skin Measurement	Y	N	
		Money Order #			
GIVE PARTICIPANT A COPY OF THROUGH IT WITH HER.	THE CONSENT FOR	M IN APPROPRIATE LANGU	AGE(S)	AND	<u>G0</u>
SET-UP FOOD MODELS WHILE	PARTICIPANT READ	S AND SIGNS CONSENT FO	RM.		
STARTING TIME OF INTERVIEV	v	АМ	1		
	HR N	/IIN PM	2		

SECTION A. DEMOGRAPHIC AND CULTURAL BACKGROUND

Thank you again for participating in this important women's health study. In the first section of the interview, I would like to ask for some background information about you and your family.

Let m	e start with your age.		
A1.\	How old were you on your	last birthday?	AGE
A2.	What is your date of birth?	MO	DAY YEAR
A3.	What is the highest grade of	or level of school that you completed?	,
		GRADE (1-11)	98
		HIGH SCHOOL GRADUATE OR GED VOCATIONAL OR TECHNICAL TRAINI SOME COLLEGE OR UNIVERSITY GRADUATED FROM COLLEGE (4-YEA POST GRADUATE DK	14

А4.	(SHOW CARD A, READ CHOIC	Mexican or Mexican-American	
	1 2	Central American	L L
		South American	
	-	African-American or Black White or Caucasian	
	•	Willia di Gaddalan	
		OTHER (SPECIFY)	
		-	
A5.	In what country were you born	?	
	RD PARTICIPANT'S ADOPTION	STATUS: ADOPTED	YES 1
•	VI SCREENING INTERVIEW)		NO 2 DK 9
	e de la companya de La companya de la co		
		OPTIVE PARENTS AND GRANDPARE R BIOLOGICAL PARENTS AND GRAM	
II INC	I ADOFILD. ASK AU-ATT FOI	A BIOLOGICAL PARLIETS AND GRAP	DI AILLINIS.
A6.	In what country was your moti	per horn?	
Αυ.	in what country was your mon		
A7.	Your father?		
A8.	Your mother's mother?		
A9.	Your mother's father?		
AJ.	Tour mother's father:		
			[
A10.	Your father's mother?		
A11.	Your father's father?		
Γ.	E DARTICIDANT IS WILLITE OR A	FRICAN-AMERICAN, GO TO SECTIO	N R
	F FANTICIFAINT IS WITHE UK A	FRICAIN-AINERICAIN, GO TO SECTIO	IV D
l l	F PARTICIPANT IS LATINA OR F	PARTLY LATINA, GO TO QUESTION	A12.

ASK A12 - A17 OF LATINA PARTICIPANTS ONLY

A12.	What was the first languag	e you learned to speak? (READ CHOICES)	
		Spanish Both Spanish and English English	1 3 5
		OTHER (SPECIFY) DK	8 9
SHOV	V CARD B FOR QUESTIONS	A13 - A17	
A13.	What languages do you spe	eak now? (SHOW CARD B, READ CHOICE	S)
	e e e e e e e e e e e e e e e e e e e	Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only	1 GO TO B1. 2 3 4 5 GO TO B1.
		DK	9
A14.	What languages do you use (SHOW CARD B, READ CH	ually speak with your spouse or partner?	
		Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only N/A DK	1 2 3 4 5

		YES NO DK	1 2 GO TO A17. 9 GO TO A17.
	IF YES:		
		t languages do you usually speak with your children? W CARD B, READ CHOICES)	
		Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only	1 2 3 4 5
		DK	9
A17.		ages do you usually speak with your friends? RD B, READ CHOICES)	
		Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only DK	1 2 3 4 5

A15. Do you have any children living in the United States?

SECTION B. PHYSICAL ACTIVITIES

The next questions are about your physical activities and exercise habits. First I will ask you about walking and bicycling to school and work. If your walking or bicycling patterns changed, please answer the following questions separately for each period.

B1. When you were in school, did you walk to and from school at least 20 minutes a day for at least 4 months out of the year?

YES 1 NO 2 **GO TO B2**. DK 9 **GO TO B2**.

	•				
		WALK TO SCHOOL	WALK TO SCHOOL	WALK TO SCHOOL	
a.	How old were you when you started walking to school at least 20 minutes a day?	AGE	AGE	AGE	
b.	How old were you when you stopped walking to school at least 20 minutes a day?	AGE	AGE	AGE	
c.	How many days a week did you walk to school?	DAYS PER WEEK	DAYS PER WEEK	DAYS PER WEEK	
d.	On the days you walked to school, how many minutes a day in total did you spend walking to and from school?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	
e.	For how many months each year did you walk to school?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR	
PR	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU WALKED TO SCHOOL AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

B2.	Did you ride a bicycle to and from school at least 20 minutes a day for at least 4
	months out of the year?

YES 1 NO 2 **GO TO B3.** DK 9 **GO TO B3.**

		BICYCLE TO SCHOOL	BICYCLE TO SCHOOL	
a.	How old were you when you started bicycling to school at least 20 minutes a day?	AGE	AGE	
b.	How old were you when you stopped bicycling to school at least 20 minutes a day?	AGE	AGE	
c.	How many days a week did you bicycle to school?	DAYS PER WEEK	DAYS PER WEEK	
d.	On the days you bicycled to school, how many minutes a day in total did you spend bicycling to and from school?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	
e.	For how many months each year did you bicycle to school?	MONTHS PER YEAR	MONTHS PER YEAR	
PR	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU RODE A BICYCLE TO SCHOOL AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?			

B3. Did you ever walk to work at least 20 minutes a day for at least 4 months out of the year?

YES 1 NO 2 GO TO B4. DK 9 GO TO B4.

		WALK TO WORK	WALK TO WORK		
a.	How old were you when you started walking to work at least 20 minutes a day?	AGE	AGE		
b.	How old were you when you stopped walking to work at least 20 minutes a day?	AGE	AGE		
c.	How many days a week did you walk to work?	DAYS PER WEEK	DAYS PER WEEK		
d.	On the days you walked to work, how many minutes a day in total did you spend walking to and from work?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9		
e.	For how many months each year did you walk to work?	MONTHS PER YEAR	MONTHS PER YEAR		
PROB	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU WALKED TO WORK AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

B4. Did you ever ride a <u>bicycle to work</u> at least 20 minutes a day for at least 4 months out of the year?

YES 1 NO 2 **GO TO B5.** DK 9 **GO TO B5.**

		BICYCLE TO WORK	BICYCLE TO WORK	
а.	How old were you when you started bicycling to work at least 20 minutes a day?	AGE	AGE	
b.	How old were you when you stopped bicycling to work at least 20 minutes a day?	AGE	AGE	
c.	How many days a week did you bicycle to work?	DAYS PER WEEK	DAYS PER WEEK	
d.	On the days you bicycled to work, how many minutes a day in total did you spend bicycling to and from work?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3 DK 9	
e.	For how many months each year did you bicycle to work?	MONTHS PER YEAR	MONTHS PER YEAR	
PRO	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU RODE A BICYCLE TO WORK AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?			

B5. Now, think about farm work, yardwork, and other <u>strenuous</u> chores you did <u>outdoors</u> when you were less than 16 years old. (SHOW CARD C) Such chores include bailing hay, picking fruit, digging, mowing the lawn, chopping wood, shoveling snow, carrying water from the river, washing clothes with a washboard, grinding corn, etc. Also, think about other strenuous chores outdoors not shown on this card.

When you were <u>less than 16 years old</u>, did you do any <u>strenuous chores outdoors</u> at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 **GO TO B6.** DK 9 **GO TO B6.**

		STRENUOUS OUTDOOR CHORES BEFORE AGE 16	STRENUOUS OUTDOOR CHORES BEFORE AGE 16	
a.	How old were you when you started doing strenuous chores outdoors for at least 2 hours a week?	AGE	AGE	
b.	How old were you when you stopped doing strenuous chores outdoors for at least 2 hours a week?	AGE	AGE	
c.	On average, about how many hours a week did you do strenuous chores outdoors? (SHOW CARD D, READ CHOICES)	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4 DK 9	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4 DK 9	
d.	For how many months each year did you do strenuous chores outdoors?	MONTHS PER YEAR	MONTHS PER YEAR	
PRO	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS CHORES OUTDOORS AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?			

B6. Now, think about farm work, yardwork, and other strenuous chores you did <u>outdoors</u> since you were 16 years or older. (SHOW CARD E)

Think only about strenuous chores you did for yourself or your family and were <u>not paid</u> for.

Since you were 16 years old, did you do any strenuous chores outdoors at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 GO TO B7. DK 9 GO TO B7.

	and a second of the second	STRENUOUS OUTDOOR CHORES SINCE AGE 16		STRENUOUS OUTDOO CHORES SINCE AGE 1	
a.	How old were you when you started doing strenuous chores outdoors for at least 2 hours a week?	AGE		AGE	
b.	How old were you when you stopped doing strenuous chores for at least 2 hours a week?	AGE		AGE	
C.	On average, about how many hours a week did you do strenuous chores outdoors? (SHOW CARD F, READ CHOICES)	2-5 hours a week 6-10 hours 11-15 hours 16-20 hours 21 or more hours	1 2 3 4 5	2-5 hours a week 6-10 hours 11-15 hours 16-20 hours 21 or more hours	1 2 3 4 5
d.	For how many months each year did you do strenuous chores outdoors?	MONTHS PER YEAR		MONTHS PER YEA	R
PROI	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS CHORES OUTDOORS AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				JT

B7. Now, think about <u>strenuous household</u> chores you did when you were less than 16 years old. (SHOW CARD G) Such chores include scrubbing floors, sweeping, vacuuming, washing windows, etc. Also, think about other strenuous household chores not shown on this card.

When you were <u>less than 16 years old</u>, did you do <u>strenuous household chores</u> at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 **GO TO B8.** DK 9 **GO TO B8.**

		STRENUOUS HOUSEHOLD CHORES BEFORE AGE 16	STRENUOUS HOUSEHOLD CHORES BEFORE AGE 16	
a.	How old were you when you started doing strenuous household chores for at least 2 hours a week?	AGE	AGE	
b.	How old were you when you stopped doing strenuous household chores for at least 2 hours a week?	AGE	AGE	
C.	On average, about how many hours a week did you do strenuous household chores? (SHOW CARD H, READ CHOICES)	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4 DK 9	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4 DK 9	
d.	For how many months each year did you do strenuous household chores?	MONTHS PER YEAR	MONTHS PER YEAR	
PROBE: ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS HOUSEHOLD CHORES AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

B8. Now, think about <u>strenuous household chores</u> you did since you were 16 years or older. (SHOW CARD I) Think only about strenuous household chores you did for yourself or your family and were <u>not paid</u> for.

Since you were 16 years old, did you do any <u>strenuous</u> household chores at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 **GO TO B9**. DK 9 **GO TO B9**.

	,				
		STRENUOUS HOUSEHOLD CHORES SINCE AGE 16	STRENUOUS HOUSEHOLD CHORES SINCE AGE 16		
a.	How old were you when started doing strenuous household chores for at least 2 hours a week?	AGE	AGE		
b.	How old were you when you stopped doing strenuous household chores for at least 2 hours a week?	AGE	AGE		
c.	On average, about how many hours a week did you do strenuous household chores? (SHOW CARD J, READ CHOICES)	2-5 hours a week 1 6-10 hours 2 11-15 hours 3 16-20 hours 4 21 or more hours 5 DK 9	2-5 hours a week 1 6-10 hours 2 11-15 hours 3 16-20 hours 4 21 or more hours 5 DK 9		
d.	For how many months each year did you do strenuous household chores?	MONTHS PER YEAR	MONTHS PER YEAR		
PROBE: ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS HOUSEHOLD CHORES AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?					

B9. Now, I will ask you about your exercise habits before 19__(1 + REFERENCE YEAR).

Please tell me about exercise and sports you did at least 1 hour a week for at least 4 months a year. Think about exercise and sports you did as a child, teenager, and an adult.

(SHOW CARD K) This card gives some examples of <u>strenuous</u> activities, like swimming laps, aerobics, calisthenics, gymnastics, dance, ballet, running, jogging, cycling on hills, tennis, basketball, racquetball, or working on exercise equipment.

Examples of <u>moderate</u> activities are brisk walking, hiking, cycling on level streets, golf, volleyball, softball, or bowling.

Also think about other exercise and sports not shown on this card, but do not include PE or gym class.

Before 19_ (1 + REFERENCE YEAR) did you participate in any exercise or sports at least 1 hour a week for at least 4 months out of the year?

YES 1 NO 2 **GO TO C1**. DK 9 **GO TO C1**.

IF YES: ASK a. AND RECORD TYPE OF ACTIVITY

ASK b. - f. FOR EACH ACTIVITY.

ASK a. - f. FOR EACH EPISODE OF PHYSICAL ACTIVITY.

		1ST ACTIVITY	2ND ACTIVITY	3RD ACTIVITY
a.	What (kind of exercise or sport / other kind of exercise or sport) did you do at least 1 hour a week for at least 4 months out of the year?			
b.	How old were you when you started (ACTIVITY)?	AGE	AGE	AGE
c.	How old were you when you stopped (ACTIVITY)?	AGE	AGE	AGE
d.	For how many months each year did you (ACTIVITY)?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR
e.	On average, about how many hours a week did you (ACTIVITY)?	HOURS MIN PER WEEK	HOURS MIN PER WEEK	HOURS MIN PER WEEK
f.	Did you do this activity mostly indoors, mostly outdoors, or both indoors and outdoors?	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9
PROBE: ARE THERE ANY OTHER ACTIVITIES YOU DID AT LEAST 1 HOUR A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

ASK a. - f. FOR EACH EPISODE OF PHYSICAL ACTIVITY.

		4TH ACTIVITY	5TH ACTIVITY	6TH ACTIVITY
a.	What other kind of exercise or sport did you do at least 1 hour a week for at least 4 months out of the year?			
b.	How old were you when you started (ACTIVITY)?	AGE	AGE	AGE
c.	How old were you when you stopped (ACTIVITY)?	AGE	AGE	AGE
d.	For how many months each year did you (ACTIVITY)?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR
e.	On average, about how many hours a week did you (ACTIVITY)?	HOURS MIN PER WEEK	HOURS MIN PER WEEK	HOURS MIN PER WEEK
f.	Did you do this activity mostly indoors, mostly outdoors, or both indoors and outdoors?	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9
PROBE: ARE THERE ANY OTHER ACTIVITIES YOU DID AT LEAST 1 HOUR A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

ASK a. - f. FOR EACH EPISODE OF PHYSICAL ACTIVITY.

		7TH ACTIVITY	8TH ACTIVITY	9TH ACTIVITY	
a.	In what other kind of exercise or sport did you do at least 1 hour a week for at least 4 months out of the year?				
b.	How old were you when you started (ACTIVITY)?	AGE	AGE	AGE	
c.	How old were you when you stopped (ACTIVITY)?	AGE	AGE	AGE	
d.	For how many months each year did you (ACTIVITY)?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR	
e.	On average, about how many hours a week did you (ACTIVITY)?	HOURS MIN PER WEEK	HOURS MIN PER WEEK	HOURS MIN PER WEEK	
f.	Did you do this activity mostly indoors, mostly outdoors, or both indoors and outdoors?	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	
PROBE: ARE THERE ANY OTHER ACTIVITIES YOU DID AT LEAST 1 HOUR A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?					
CONTINUATION PAGE USED YES 1 NO 2					

17

NUMBER OF CONTINUATION PAGES USED

SECTION C. SUN EXPOSURE

Now I have some questions about being outdoors.

C1.	Think about when you were (AGE).	On an average day in the summertime, about how many hours did you spend outdoors? (SHOW CARD L, READ CHOICES)						
	10-15 years old	less than 1 hour a day 1-2 hours 3-4 hours 5-6 hours 7 or more hours	1 2 3 4 5					
		DK .	9					
	25-30 years old	less than 1 hour a day 1-2 hours 3-4 hours 5-6 hours 7 or more hours	1 2 3 4 5					
		DK	9					
IF AC	E 55 OR YOUNGER, GO TO CZ	<u>)</u>						
	50-55 years old	less than 1 hour a day 1-2 hours 3-4 hours 5-6 hours 7 or more hours	1 2 3 4 5					
		DK	9					

C2.	In the past 3 months, did you spend <u>less</u> time	YES	1
	outdoors than usual because of any medical	NO	2
	treatment or illness?	DK	9

C3.		e 19 (1+REFERENCE YEAR), when you were ovoid or protect yourself from the sun most of the			day, did
·		staying in the shade	YES NO		1 2
		wearing a big hat	YES NO		1 2
		wearing long pants	YES NO		1 2
		wearing long sleeves	YES NO		1 2
		N/A: PARTICIPANT DID NOT GO OUTDOOI	RS		8
16 F - 4		TO ALL OF THE ABOVE: GO TO C7. S TO ANY OF THE ABOVE:			
	C4.	How old were you when you started protecting yourself from the sun by? (REPEAT YES RESPONSES AT C3)			
	C5.	Do you still protect yourself from the sun by? (REPEAT YES RESPONSES AT C3)		YES 1 NO 2	GO ТО С7
		IF NO: C6. How old were you when you stopped protecting yourself from the sun by? (REPEAT YES RESPONSES AT C3)			

C7.		will ask you about sunscree s became available in the 19	·	om the	sun. These
		e 19 (1 + REFERENCE YEA) ct yourself from the sun? (S			n lotions to
			Never Sometimes About half the time Most of the time Always	1 2 3 4 5	GO TO C10. GO TO C10. GO TO C10.
			DK	9	GO TO C10.
	IF MO	ST OF THE TIME OR ALWA	<u>YS:</u>		
	C8.	How old were you when yo sunscreen lotions?	ou started using		
	C9.	For how many years did yo lotions?	ou use sunscreen		
C10.		had to be in the hot sun for ction, how would your skin r CES)			
			Get a severe sunburn with blistering		1
			Get a moderate to severe sunburn without blistering		2
			Get a mild sunburn		3
			Get no sunburn		4
			OTHER (SPECIFY)	Bille White	8
			DK		9

C11.	If you had to be in the sun for lo your skin react? Would you		
•		Get a deep tan	1
		Get a moderate tan	2
		Get a light tan	3
		Get no tan	4
		OTHER (SPECIFY)	
			_ 8
		DK	9
C12.	What is your natural eye color?	(SHOW CARD P, READ CHOICE	ES)
	en de la companya de	Blue	1
		Grey	2
		Green	3
		Hazel	4
		Brown or black	5
		OTHER (SPECIFY)	
			8
		DK	9
C13.	When you were 20 years old, we READ CHOICES)	vhat was your natural hair color?	SHOW CARD Q
		Blonde	1
		Red or auburn	2
		Light brown	3
		Medium or dark brown	4
		Black	5
		OTHER (SPECIFY)	
			. 8
		DK	9
•			

MEASUREMENT OF SKIN PIGMENTATION

Now I would like to take some measurements of your skin. I will use this instrument which will take a photograph of your skin to measure the skin pigmentation. Let me first set up the instrument, and then I will measure the skin on your upper right arm and on your forehead.

SET UP AND CALIBRATE EQUIPMENT.

APPLY TOWELETTE AND <u>LIGHTLY</u> WIPE RIGHT INNER UPPER ARM (HALF WAY BETWEEN THE ELBOW AND SHOULDER) AND THE CENTRAL FOREHEAD (1 INCH ABOVE THE EYES).

MEASURE SKIN TWICE ON RIGHT INNER UPPER ARM (1/2 INCH APART).

MEASURE SKIN TWICE ON CENTRAL FOREHEAD (1/2 INCH APART).

ATTACH CHROMA METER PRINTOUT BELOW AND RECORD MEASUREMENTS. (DO NOT TAPE OVER MEASUREMENT NUMBERS)

	ME	ASUREMENT	#1	MEASUREMENT #2				
	Υ	x	у	Y	x	У		
INNER ARM								
FORE- HEAD								

ATTACH CHROMA METER PRINTOUT HERE	
\cdot	

SECTION D. DIET HISTORY

The next section of the interview concerns your diet. First, I will ask you how often you usually ate beans, vegetables, and fruits in 19__ (REFERENCE YEAR). Please tell me the number of times a day, week, month, or year, whichever is easiest for you.

D1.	In 19_ (REFERENCE YEAR), how often did you usually eat beans, such as pinto, garbanzo, kidney, refried beans or black-eyed peas? Please do not include green or string beans.
	times per DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9
D2.	How often did you usually eat vegetables? Please do not include salad or potatoes.
	times per DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9
D3.	How often did you usually eat any type of fruit, including canned, fresh, or frozen? Please do not include fruit juices.
	times per DAY 1
	WEEK 2
	MONTH 3
	YEAR 4
	DK 9

Now I have a list of specific foods. Please tell me how often you usually ate each one in 19_(REFERENCE YEAR). Again, please tell me the number of times a day, week, month, or year, whichever is easiest for you. Think about what you ate at home and in restaurants, include meals and snacks. Our list probably includes a number of foods you didn't eat. If you didn't eat a food, please tell me that.

For some of the foods, I will ask you <u>how much</u> you usually ate. To help you estimate how much you ate, we have different kinds of models. **SET UP MODELS**.

SHOW MEAT MODELS. For example, you can tell me you usually ate this amount of meat, or more, or less. SHOW WOOD CUBES. Think of these wood cubes as different size servings for foods such as stew and vegetables. You can show me which size serving you usually ate. Do you have any questions?

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19_(REFERENCE YEAR)?				D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?				
·					PORTIC	PORTION SIZE		SUBSTITUTED	
	D	w	М	Υ	GUIDE	SIZE	GUIDE	SIZE	
First I will ask you about MEATS A include those you made at home, t	AND MA	AIN DIS t, and a	HES yo te in re	u ate in ' staurants	19 (REI	ERENCE Y	YEAR). Ple	ease	
hamburgers, cheeseburgers, or turkey burgers					model				
burritos made with meat or chicken					number				
tacos, tostados, enchiladas <i>or empanadas</i> made with meat or chicken					number				
beef or pork in mixed dishes, such as stir-fry, fajitas, stew, or pot pie, or albondigas					READ: Please include the beef or pork portion only.				
					wood cubes		-		
beef or pork prepared <u>other</u> ways, such as steaks, roasts, ribs, barbeque, pork chops, or					READ: Please include the beef or pork portion only.				
roast beef sandwiches					model				

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?				D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?			
·	19_(NEFENE!	WCE 1E	An):	PORTIC	ON SIZE	SUBSTITUTED	
	D	W·	M	Υ	GUIDE	SIZE	GUIDE	SIZE
ham hocks, salt pork, pigs feet, pigs knuckles, including as					READ: Pl portion o		de the mea	at
seasoning or combined with other foods					wood cubes			
fried chicken or chicken nuggets (at home or in restaurants)					pieces			
chicken or turkey in mixed dishes, such as stir-fry, fajitas,				·	11 '	READ: Please include the turkey portion only.		
stew, gumbo, or pot pie, mole or arroz con pollo					wood cubes			
chicken or turkey prepared other ways, such as baked, grilled, or					READ: Please include the chicken or turkey portion only.			ken or
roasted, or chicken or turkey sandwiches					model			
liver or liverwurst					model			
hot dogs					number			
bologna, salami, ham, or other lunch meats; do not include roast beef, turkey or chicken					slices			
bacon or sausage, or chorizo					number			
Now I would like to ask you about	several	types o	of fish.					
tuna including fresh, canned, tuna salad or tuna casserole					wood cubes			
white fish, such as flounder, halibut, snapper, bass, cod or sole, including fish sticks					model			
dark fish, such as salmon, mackerel, catfish, trout, herring or sardines					model			
pizza					slices			

FOOD ITEM	(eat/d	rink) D/ BEVEI	d you u RAGE) i NCE YE	n ,	D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]? PORTION SIZE SUBSTITUTED				
		ı	Γ	T	, on a	JII OILL	300311	110120	
	D	W	M	Υ	GUIDE	SIZE	GUIDE	SIZE	
spaghetti, lasagna, ravioli or other pasta with tomato sauce					wood cubes				
noodles or pasta <u>without</u> tomato sauce, such as Fettucine Alfredo, cup-of-soup or pasta salad					wood cubes	:	-		
mixed dishes made with cheese, such as macaroni and cheese, cheese enchiladas, or quesadillas, chilaquiles, or pupusas				·	wood cubes				
Now I will ask you about FRUITS y frozen, and from salad bars, and from	ou ate uit in a	in 19 guas fre	(REF	ERENCE	YEAR). P	ease inclu	ide fresh, d	anned,	
apples or applesauce					number				
bananas or plantains					number				
oranges, tangerines, or grapefruit				-	number				
pears					number				
prunes					wood cubes				
cantaloupe, including from salad bars					quarters				
peaches, apricots, or nectarines (fresh, in season)					number				
peaches, apricots, or nectarines (canned, frozen, or dried)					number				
watermelon (in season)					wood cubes				
strawberries or other berries (in season)	Ē				wood cubes				

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?				D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?			
·	19(REFERE	NCE YE	AK)?	PORTIC	ON SIZE	SUBSTITUTED	
	D	W	M	Υ	GUIDE	SIZE	GUIDE	SIZE
Next I am going to ask you about vegetables in mixed dishes.	VEGETA	ABLES y	ou ate	in 19	_ (REFERE	NCE YEAF	R). Please	include
First, I would like to ask you about	severa	l differe	nt type	s of bea	ns and bea	an soups.	USE BEAN	ВООК
green beans, string beans, or green peas					wood cubes			
canned chili <u>with</u> beans <i>American-style</i> or chili <u>with</u> beans in restaurants			·		bowls			
frijoles de la olla					bowls			
pinto beans or refried beans	į				BEAN PO	ORTION OF	NLY	
made from pinto beans, including in burritos or tostados					wood cubes			
garbanzo beans, chickpeas, or ceci beans					wood cubes			
lentils, split peas or lentil soup or split peas soup					bowls			
other common types of beans, that is, kidney, lima, black, red, great northern, or small white beans, or black-eyed peas, pork'n beans, or baked beans (SHOW ALL 4 PAGES)					wood cubes			
other types of beans, including in soups; anasazi, broad, cannelli, chana dal, cowpeas, cranberry, fava, mung, navy, pink, pinquito, soybeans, 16- bean soup (SHOW LIST)					wood cubes			
IF OTHER BEANS WERE EATEN, A D6. Of these other types of bea		ich type	e did yo	ou eat mo	ost often?	(RECORD		WO)
							CODE: L	

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19_(REFERENCE YEAR)?			SHADED	: How mat/drink) [OR MORE (OR IF uch did you each time)?		
	D	w	M	Υ	GUIDE	SIZE	GUIDE	SIZE
alfalfa sprouts including on sandwiches and in salads (SHOW PHOTO IN BEAN BOOK)					wood cubes			
regular bean sprouts (SHOW PHOTO IN BEAN BOOK)					wood cubes			
tofu					wood cubes			
meat substitutes made from soy, including veggie burgers					model	·		
soy sauce					spoons			
miso soup					bowls			
soups with tomatoes or carrots, such as tomato soup, minestrone or vegetable soup, or caldo de pollo/res; do not include bean soups					bowls			
tomatoes, including fresh and stewed tomatoes, and salsa					number			
ketchup or taco sauce					spoons			
carrots, including in mixed vegetables, stew, or salads					wood cubes			
corn, including on-the-cob, canned, or frozen					wood cubes			
squash which is yellow inside, such as winter squash, acorn or butternut squash					wood cubes			
squash which is white or pale green inside, such as summer squash or zucchini <i>or chayote</i>					wood cubes			
green or red bell peppers, either raw or cooked, or chile rellenos					number			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?			D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?				
·				, .	PORTIC	ON SIZE	SUBSTITUTED	
	D	w	М	Υ	GUIDE	SIZE	GUIDE	SIZE
other peppers, including chiles, jalapeños and hot red peppers (dried or fresh)					spoons		·	
avocado or guacamole					wood cubes			
broccoli			,		wood cubes			
cauliflower or brussel sprouts		. Martine	-		wood cubes			
beets or turnips					wood cubes			
cooked spinach, mustard greens, turnip greens, collards, kale or chard					wood cubes			i
cole slaw or cabbage, <i>or curtido</i>					wood cubes			
onions					spoons			
garlic, including fresh, baked, garlic powder or garlic salt					S,M,L			
lettuce					bowls			
salad dressing or mayonnaise, including on sandwiches					spoons			
IF SALAD DRESSING/MAYONNAISE WAS EATEN, ASK: D7. How often did you eat low-fat or non-fat salad dressing or mayonnaise (READ CHOICES)? never or rarely 1 sometimes 2 often or always 3 DK 9								
sweet potatoes, yams or pumpkin					wood cubes			
fried potatoes, including french fries and hash browns					wood cubes			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19(REFERENCE YEAR)?			D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]? PORTION SIZE SUBSTITUTED				
	D	w	M	Υ	GUIDE	SIZE	GUIDE	SIZE
potatoes prepared other ways, such as baked, boiled, mashed or potato salad		-		,	wood cubes		·	·
rice or mixed dishes made with rice, such as fried rice, jambalaya or Spanish or Mexican rice					wood cubes	RTION ON	LY	
Next I will ask you about different	types	of BREA	DS you	ate in 1	9_ (REFEI	RENCE YE	AR).	
whole grain bread, such as whole wheat or rye, alone or as sandwiches					slices	·		
white bread, including sourdough, French or Italian bread, alone or as sandwiches	10 A A A A A A A A A A A A A A A A A A A				slices			,
flour tortillas					number			
corn tortillas, cornbread, corn muffins or cornbread stuffing					number			
bagels, English muffins or hamburger or hot dog buns					number			
biscuits or muffins					number			
butter on bread, potatoes or vegetables (not margarine)					pats			
margarine			<u>.</u>		spoons			
IF MARGARINE WAS EATEN, ASK: D8. What type of margarine did you usually eat? CODE: CODE:								
Next are CEREALS and some brea YEAR).	kfast fo	oods. P	lease c	ontinue t	o think abo	out 19	_ (REFEREN	ICE
fiber or bran cereals like raisin bran, granola, or shredded wheat					bowls			
any other kind of cold cereals					bowls			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?			D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?				
·	19(1	REFERE	NCE YE	AR)?	PORTION SIZE		SUBSTITUTED	
	D	w	M	Υ	GUIDE	SIZE	GUIDE	SIZE
IF COLD CEREAL WAS EATEN, AS D9. What types of cold cereal of		eat mos	t often	? .			CODE:	
cooked cereals like oatmeal, cream of wheat, or grits					bowls			
IF COLD OR HOT CEREAL WAS EA ASK: milk on (hot or cold) cereal READ OPTIO		1 son	ays / on netimes rer / rard		S,M,L			
pancakes, waffles, or french toast, including frozen					number			
Next we have SNACKS.								
snacks, like potato chips, corn chips, popcorn, pork skins or nuts					wood cubes			
peanut butter					spoons			
Next are some SWEETS and desse	erts.							
doughnuts, churros or pastries, or pan dulce					number			
chocolate candy or candy bars					S,M,L			
cake or cookies					S,M,L			
Next we have a few DAIRY PROD	UCTS.							
ice cream					wood cubes			
IF ICE CREAM WAS EATEN, ASK: D10. How often did you eat low-		non-fat i	ce crea	m (REA	D CHOICES	never o sometir		1 2 3 9

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?			D5. IF ONCE A WEEK OR MORE (OR SHADED): How much did you usually (eat/drink) [each time]?				
	13(1	\L! L!\L!		Ally:	PORTIC	N SIZE	SUBSTITUTED	
	D	W	М	Υ	GUIDE	SIZE	GUIDE	SIZE
yogurt or frozen yogurt					wood cubes			
IF YOGURT OR FROZEN YOGURT WAS EATEN, ASK: D11. How often did you eat low-fat or non-fat yogurt or frozen yogurt (READ CHOICES)? never or rarely sometimes often or always DK								
eggs, including omelettes	,				number			
cheese or cheese spreads					slices			
sour cream <i>or crema</i> , including in Mexican dishes, on baked potatoes, and in dips					spoons			r
Now I have a list of BEVERAGES.								
milk including chocolate milk and licuados (NOT ON CEREAL)					glasses			
IF MILK WAS DRUNK, ASK: D12. How often did you drink lov	w-fat or	skim m	nilk (RE/	AD CHO	ICES)?	never o sometir often o DK	•	1 2 3 9
soy milk					glasses			
instant breakfast drinks or diet shakes, such as Carnation or Slim Fast					number			
coffee, hot or iced					cups			
IF COFFEE WAS DRUNK, ASK: D13. Did you usually drink regular or decaffeinated coffee? REGULAR DECAF BOTH EQUALLY DK							1 2 3 9	
herbal tea, hot or iced					cups			
regular tea, hot or iced					cups			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?			D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?			u	
	19(nerenei	WCE TE	.An):	PORTION SIZE		SUBSTITUTED	
	D	w	М	Υ	GUIDE	SIZE	GUIDE	SIZE
add sugar to foods such as coffee, tea or cereal; do not include sugar substitutes					S,M,L			
orange juice or grapefruit juice					glasses			
tomato juice or V8 juice					glasses			
drinks with added vitamin C such as Ocean Spray juice cocktail, Kool-Aid, or Hi-C	. %		. •		glasses			
coke or other soda or sweetened bottled drinks, such as Snapple fruit drinks; do not include diet soda, diet drinks, or teas					glasses			
beer					cans/ bottles			,
wine, wine coolers or champagne					wine glasses			
cocktails, mixed drinks or shots					drinks/ shots			

D14. In 19_ (REFERENCE YEAR), what kind of fat or oil did you use most often for cooking, frying, or to season your food? (SHOW CARD R, READ CHOICES) (RECORD UP TO TWO)

margarine	1
low-fat margarine	2
butter	3
olive or canola oil	4
corn, vegetable, or other oil	5
Pam or other spray	6
Crisco shortening	7
lard, fatback, or bacon fat	8
DOESN'T USE ADDED FAT/OIL	6
OTHER (SPECIFY)	
	88
DK .	99

That completes all of the diet questions for which we will be using the models. I only have a few more questions about diet.

We've just been talking about what you ate in 19_ (REFERENCE YEAR). Now think back 10 years to 19_ (REFERENCE YEAR - 10). I would like to know how your diet was different back then.

FOOD	D15. Did you eat more, less, or the same amount of (FOOD) in 19 (REFERENCE YEAR - 10) as you did in 19 (REFERENCE YEAR)? I.E., CONSUMPTION 10 YEARS AGO WAS
fruit	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
beans (I.E., PINTO, GARBANZO, KIDNEY, REFRIED BEANS, AND BLACK-EYED PEAS; NOT GREEN OR STRING BEANS)	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
vegetables	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
whole grain breads	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
fiber or bran cereals (I.E., RAISIN BRAN, GRANOLA, OR SHREDDED WHEAT)	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
beef or pork	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
chicken	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK

For several types of foods I would like to know how your diet has changed over your lifetime. I will ask you about milk, eggs and fish.

	re between (AGE AND AGE), how usually drink milk? S)	D20. How about eggs?	D21. How about fish?	
	OOD ITEM FOR A GIVEN AGE I TO THE NEXT AGE.			
AGE 10-15	every day several times a week once a week several times a month once a month or less never or rarely	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
. , este	DK	٠ ٠	9	9
AGE 25-30	every day several times a week once a week several times a month once a month or less never or rarely DK	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
IF AGE 55 OR YOUN	GER, GO TO E1.			
AGE 50-55	every day several times a week once a week several times a month once a month or less never or rarely DK	123456 9	1 2 3 4 5 6	123456 9

SECTION E. VITAMINS

Now I would like to ask you about vitamins.

E1. Before 19____ (1 + REFERENCE YEAR), did you ever take any of the following at least once a week for six months or longer: vitamins, minerals, garlic pills, or fiber supplements?

YES 1 NO 2 **GO TO E25.** DK 9 **GO TO E25.**

IF YES:

	•
First, I will ask you about multiple vitamin pills. E2. Have you ever taken multiple vitamins, such as One-a-day, Centrum, or Theragram at least once a week for six months or longer?	YES 1 NO 2 GO TO E7. DK 9 GO TO E7.
E3. How old were you when you first took multiple vitamins?	AGE
E4. For how many years in total did you take multiple vitamins?	YEARS
E5. Did you take multiple vitamins, such as One-a-day, Centrum, or Theragram, for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E7. DK 9 GO TO E7.
E6. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9 MAX=1/DAY

E7. Did you take an antioxidant formula multiple vitamin for at least six months in 19 (REFERENCE YEAR)? (A SINGLE PILL THAT CONTAINS LARGE AMOUNTS OF BETA-CAROTENE, AND VITAMINS C AND E)	YES 1 NO 2 GO TO E9. DK 9 GO TO E9.
E8. How many pills did you usually take each week?	PILLS PER
each week:	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9 MAX=1/DAY
and the second s	
Next I would like to know about single vitamin supplements.	YES 1 NO 2 GO TO E15. DK 9 GO TO E15.
E9. Have you <u>ever</u> taken Vitamin C at least once a week for six months or longer?	
E10. How old were you when you first took Vitamin C regularly?	AGE
E11. For how many years in total did you take Vitamin C?	YEARS
E12. Did you take Vitamin C for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E15. DK 9 GO TO E15.
E13. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9
E14. In 19 (REFERENCE YEAR), how many milligrams of Vitamin C were	mgs

E15.	Did you take Vitamin A or beta-carotene for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E18. DK 9 GO TO E18.
E16.	In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9 MAX=1/DAY
E17.	Did the pills contain beta-carotene only, retinol only, or both?	BETA-CAROTENE ONLY 1 RETINOL ONLY 2 BOTH 3 DK 9

E18.	Did you take Vitamin E for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E21. DK 9 GO TO E21.	
E19.	In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9	
E20.	How many IUs or international units of Vitamin E were in each pill?	IUs	

E21. Did you take Garlic Pills for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E23. DK 9 GO TO E23.
E22. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9

E23.	Did you take fiber supplements for at least six months in 19 (REFERENCE YEAR)?	YES NO DK	1 2 GO TO E25. 9 GO TO E25.
E24.	In 19 (REFERENCE YEAR), how many pills or teaspoons did you usually take each week?	OR OR	PILLS TEASPOONS 1 2 3 4 9

E25.	Did you ever take cod liver oil before age 20?							
			· ·	YES NO DK		1 2 GO TO S 9 GO TO S		
	<u>IF YE</u>	<u>:S:</u>						
	E26.	How often did	you take cod liver oil? (RE	AD CHOICES)				
			Once a week or mo	re often	•	1	•	
			1-3 times a month Less than once a m	onth		2 3		
			OTHER (SPECIFY) DK		•	8 9		
* •	. •	tang mengeberah di kecamatan di Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn	et a mare allemente de la companya d	•				
	E27.	For how many	months or years in total did	you				
			oil before age 20?			MONTHS	1	
						YEARS	2	

SECTION F. ANTHROPOMETRY

As we talked about earlier, as part of this study we would like to take measurements of your height, weight, waist, and hips, and I would like to do that at this time. I will take each measurement three times.

IF PARTICIPANT REFUSES AN	Y OR ALL MEASUREMENTS,	, INDICATE WHICH (ONES WERE REFUSED
(CIRCLE ALL THAT APPLY):			

HEIGHT	1
WEIGHT	2
WAIST CIRCUMFERENCE	. 3
HIP CIRCUMFERENCE	. 4

IF PARTICIPANT IS BED RIDDEN, WHEELCHAIR BOUND, OR UNSTABLE ON HER FEET, OR > 300 LBS ASK AND RECORD HER CURRENT HEIGHT AND WEIGHT IN THE MARGIN.

SET-UP EQUIPMENT AND TAKE MEASUREMENTS. RECORD BELOW.

egan gerekk	MEASUREMENT 1	MEASUREMENT 2	MEASUREMENT 3
HEIGHT	смѕ	СМЅ	СМЅ
WEIGHT	KGS	KGS KGS	i
WAIST CIRCUMFERENCE	СМЅ	Смѕ	смѕ
HIP CIRCUMFERENCE	смѕ	смѕ	смѕ

QUESTIONS TO BE ANSWERED BY THE INTERVIEWER:

WAS THE PARTICIPANT'S POSTURE STOOPED?

YES, A LOT	1
YES, SOME	2
YES, A LITTLE	3
NO	4

DID THE PARTICIPANT REMOVE HER SHOES WHEN MEASURING HEIGHT?

YES	1
NO	2
N/A	8

DID THE PARTICIPANT REMOVE HER SHOES WHEN MEASURING WEIGHT?

YES	1
NO	2
N/A	8

DESCRIPTION OF PARTICIPANT'S CLOTHING (CIRCLE ALL THAT APPLY):

	T-SHIRT LIGHTWEIGHT SHIRT OR BLOUSE HEAVY SHIRT OR BLOUSE SWEATER OR SWEATSHIRT	1 2 3 4
	LIGHTWEIGHT DRESS HEAVY DRESS	5 6
	LIGHTWEIGHT PANTS OR SKIRT HEAVY PANTS OR SKIRT OR SWEATPANTS JEANS OR DENIM SKIRT OTHER (SPECIFY)	7 8 9 10
	N/A: ALL MEASUREMENTS REFUS	 SED 88
WAS THE WAIST MEASUREMENT TAKEN OVER	CLOTHING?	·
	YES NO N/A	1 2 8
HOW WELL COULD YOU IDENTIFY THE PROPER	PLACE TO TAKE THE WAIST MEAS	SUREMENT?
	VERY WELL ADEQUATELY NOT WELL AT ALL N/A	1 2 3 8
HOW WELL COULD YOU IDENTIFY THE PROPER	PLACE TO TAKE THE HIP MEASUR	EMENT?
	VERY WELL ADEQUATELY NOT WELL AT ALL N/A	1 2 3 8

The next set of questions are about your weight and body shape at different times in your life. When answering these questions, please don't include any times when you were pregnant.

F1. Which of these pictures best represents your body shape when you were (about (AGE) / between (AGE AND AGE)) (SHOW CARD T)		F2. About how much did you usually weigh when you were between (AGE) and (AGE)?	F3. How tall were you at that time?
AGE 12	PICTURE #	X	X
AGE 25-30	PICTURE #	POUNDS 1 KGS 2	FEET INCHES OR
			CENTIMETERS
AGE 50-55	PICTURE #	POUNDS 1 KGS 2	X
F4. Which of these pictures in 19 (REFERENCE YEA			PICTURE #
F5. How much did you weig	h in 19 (REFERE!		POUNDS 1 KGS 2

F6.	Between the ages of 25 an what is the most you have include any times when you	ever weighed? Please don't	POUNDS 1 KGS 2	
F7.	How old were you when yo	ou first weighed (POUNDS/KGS)?	AGE	
F8.	Between the ages of 25 and what is the least you have any times when you were it	ever weighed? Please don't include		
. .		 A control of the contro	POUNDS 1 KGS 2	
F9.	How old were you when yo	ou last weighed (POUNDS/KGS)?	AGE	7
F10.		ou were pregnant, when you gain wor gain it the easiest? (CIRCLE ALL		our body
		ON THE ARMS AROUND THE CHEST OR SHOULD AROUND THE WAIST OR STOMAG AROUND THE HIPS OR BUTTOCKS ON THE THIGHS EQUALLY ALL OVER	CH	1 2 3 4 5 6
		OTHER (SPECIFY)		
		HAVEN'T GAINED WEIGHT		8 9

SECTION G. RESIDENTIAL HISTORY

Now I'd like to ask you about all the places in which you have lived since you were born. I am interested in the cities or towns where you have lived, not the exact address.

	G1. Where did you live first / Where did you live next?				G2. In what year or at what age did you move to (CITY)?	G3	city sub tov	TY)	a or
	CITY	STATE	COUNTRY	CODE LATITUDE	YEAR		CIT SUE TO\ RUE ARE	BURE WN RAL	3
1					X	1	2	3	4
2					19 AGE	1	2	3	4
3					19 AGE	1	2	3	4
4					19 AGE	1	2	3	4
5					19 AGE	1	2	3	4
6					19 AGE	1	2	3	4
7					19 AGE	1	2	3	4

-	G1. Where did you live ne	ext?			G2. In what what did yo to (CI	r at age u move	G3	city sub tov	TY)	a , or
·	CITY	STATE	· COUNTRY	CODE LATITUDE	YEA	R	3 4	CIT' SUE TOV RUF ARE	BURE WN RAL	3
8					19 AGE		1	2	3	4
9	and the second s				19 AGE		1	2	3	4
10					19 AGE		1	2	3	4
11					19		1	2	3	4
12					19 AGE		1	2	3	4
13					19 AGE		1	2	3	4
14					19 AGE		1	2	3	4
	CONTINUATION PAGE	USED:	YE							
	NUMBER OF CONTINUATION PAGES USED									

SECTION H. OCCUPATIONAL HISTORY

H1. Now I would like to ask about your paid work .

Have you ever had a paid job for 1 year or longer?

YES 1 NO 2 **GO TO SECTION J**

Please tell me about all the jobs you have held or the types of work you have done for one year or longer. Think about <u>paid</u> full-time or part-time work and when you were self-employed. Also tell me when you were a <u>full-time</u> homemaker.

ASK QUESTIONS a. - f. FOR EACH JOB HELD OR TYPE OF WORK DONE.

		1ST JOB	2ND JOB
а.	What was the job title or the type of work you did (first / next) for 1 year or longer?		
	(PROBE FOR TYPE OF BUSINESS OR INDUSTRY)		
	IF <u>FULL-TIME</u> HOMEMAKER: ASK	b. AND c. ONLY	
b.	In what year or at what age did you start working as a (JOB TITLE)?	19 AGE	19 AGE
C.	In what year or at what age did you stop working as a (JOB TITLE)?	19 AGE	19 AGE
d.	On average, how many hours a week did you usually work in this job?	HOURS PER WEEK	HOURS PER WEEK
e.	Did you work outdoors in this job? IF YES: On average, how many hours a week did you work outdoors in this job?	YES 1 NO 2 GO TO f . HOURS PER WEEK	YES 1 NO 2 GO TO f. HOURS PER WEEK
f.	In this job, what was your level of physical activity? (SHOW CARD U, READ CHOICES)	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9
g.	In this job, how many hours a week did you do strenuous activities or hard labor?	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB
h.	For how many months each year did you do strenuous activities or hard labor?	MONTHS PER YEAR	MONTHS PER YEAR

ASK a. - f. FOR EACH JOB HELD OR TYPE OF WORK DONE.

<u> </u>		3RD JOB	4TH JOB
a.	What was the job title or the type of work you did next for 1 year or longer?		
	(PROBE FOR TYPE OF BUSINESS OR INDUSTRY)		
	IF <u>FULL-TIME</u> HOMEMAKER: ASK	b. AND c. ONLY	
b.	In what year or at what age did you start working as a (JOB TITLE)?	19 AGE	19 AGE
c.	In what year or at what age did you stop working as a (JOB TITLE)?	19 AGE	19 AGE
d.	On average, how many hours a week did you usually work in this job?	HOURS PER WEEK	HOURS PER WEEK
e.	Did you work outdoors in this job?	YES 1 NO 2 GO TO f.	YES 1 NO 2 GO TO f .
	IF YES: On average, how many hours a week did you work <u>outdoors</u> in this job?	HOURS PER WEEK	HOURS PER WEEK
f.	In this job, what was your level of physical activity? (SHOW CARD U, READ CHOICES)	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9
g.	In this job, how many hours a week did you do strenuous activities or hard labor?	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB
h.	For how many months each year did you do strenuous activities or hard labor?	MONTHS PER YEAR	MONTHS PER YEAR

ASK a. - f. FOR EACH JOB HELD OR TYPE OF WORK DONE.

		5TH JOB	6TH JOB
а.	What was the job title or the type of work you did next for 1 year or longer?		
	(PROBE FOR TYPE OF BUSINESS OR INDUSTRY)		
	IF <u>FULL-TIME</u> HOMEMAKER: ASK	b. AND c. ONLY	
b.	In what year or at what age did you start working as a (JOB TITLE)?	19 AGE	19 AGE
c.	In what year or at what age did you stop working as a (JOB TITLE)?	19 AGE	19 AGE
d.	On average, how many hours a week did you usually work in this job?	HOURS PER WEEK	HOURS PER WEEK
e.	Did you work outdoors in this job?	YES 1 NO 2 GO TO f .	YES 1 NO 2 GO TO f .
	IF YES: On average, how many hours a week did you work outdoors in this job?	HOURS PER WEEK	HOURS PER WEEK
f.	In this job, what was your level of physical activity? (SHOW CARD U, READ CHOICES)	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9
g.	In this job, how many hours a week did you do strenuous activities or hard labor?	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB
h.	For how many months each year did you do strenuous activities or hard labor?	MONTHS PER YEAR	MONTHS PER YEAR
	CONTINUATION PA	AGE USED YES NO	1 2
	NUMBER OF CONT	INUATION PAGES USED	

SECTION J. PREGNANCY HISTORY

The next section of the interview is about your pregnancies.

J1. How many times have you been pregnant? Please include all live births, stillbirths, miscarriages, abortions, tubal or ectopic pregnancies.

IF NEVER PREGNANT: RECORD 98

GO TO J14, page 59.

IF ONE OR MORE PREGNANCIES:

Now I would like to ask you some questions about (each of your pregnancies / your pregnancy).

GO TO J2.

NOTE: MULTIPLE BIRTHS SHOULD BE COUNTED AS ONE PREGNANCY

ASK J2 - J13 FOR EACH PREGNANCY BEFORE ASKING ABOUT NEXT PREGNANCY.

		1ST PREGNANCY	2ND PREGNANCY	3RD PREGNANCY
J2.	What was the outcome of your (first / next) pregnancy? (SHOW CARD V, READ CHOICES)			
	Single live birth 2 Multiple live birth 3 Stillbirth 4 Miscarriage 5 Tubal or ectopic pregnancy 6 Induced abortion 7 Currently pregnant 1 OTHER (SPECIFY) 8 DK 9 IF CURRENTLY PREGNANT OR FIRST PREGNANCY: SKIP TO J14			
J3.	How long did this pregnancy last?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J4.	During what month and year (was your baby born / did this pregnancy end)?	MO YR	MO YR	MO YR
	IF LIVE BIRTH OR STILLBIRTH, GO TO J6. OTHERWISE, GO TO J2 FOR THE NEXT PRE	GNANCY.		

,		1ST PREG	2ND PREG	3RD PREG
J6.	Did you breast-feed (this baby / any of these babies)? IF YES: J7. Did you breast-feed (this baby / any of these babies for(READ CHOICES)	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12
	less than 2 weeks 1 2 weeks or longer 2	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9
J8.	Which of the following choices best describes the main reason you breast-fed for less than 2 weeks? (SHOW CARD W, READ CHOICES) Insufficient milk 1 Painful nursing 2 Breast infection or mastitis 3 OTHER (SPECIFY) 8 DK 9	GO TO J12	GO TO J12	GO TO J12
J9.	How old (was the baby / were the babies) when you started to regularly supplement your breast-feeding with formula, regular milk, or baby food?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J10.	How old (was the baby / were the babies) when you stopped breast-feeding altogether?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J11.	Which of the following choices best describes the main reason you stopped breast-feeding when you did? (SHOW CARD X, READ CHOICES) Normal weaning 1 Returned or started to work 2 Insufficient milk 3 Painful nursing 4 Breast infection or mastitis 5 OTHER (SPECIFY) 8 DK 9			
J12.	Did you receive any medication to stop milk production? IF YES:	YES 1 NO 2→ J2 DK 9→ J2	YES 1 NO 2→ J2 DK 9→ J2	YES 1 NO 2→ J2 DK 9→ J2
	J13. Was it in the form of a shot or a pill?	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9

ASK J2 - J13 FOR EACH PREGNANCY BEFORE ASKING ABOUT NEXT PREGNANCY.

		4TH PREGNANCY	5TH PREGNANCY	6TH PREGNANCY
J2.	What was the outcome of your (first / next) pregnancy? (SHOW CARD Y, READ CHOICES)			
	Single live birth 2 Multiple live birth 3 Stillbirth 4 Miscarriage 5 Tubal or ectopic pregnancy 6 Induced abortion 7 Currently pregnant 1 OTHER (SPECIFY) 8 DK 9 IF CURRENTLY PREGNANT: SKIP TO J14			
J3.	How long did this pregnancy last?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J4.	During what month and year (was your baby born / did this pregnancy end)?	MO YR	MO YR	MO YR
,	IF LIVE BIRTH OR STILLBIRTH, GO TO J6. OTHERWISE, GO TO J2 FOR THE NEXT PR	REGNANCY.		

•		4TH PREG	5TH PREG	6TH PREG
J6.	Did you breast-feed (this baby / any of these babies)? IF YES:	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12
	J7. Did you breast-feed (this baby / any of these babies for(READ CHOICES)	1 GO ТО Ј8	1 00 70 10	
	less than 2 weeks 1 2 weeks or longer 2	2 GO TO J9	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9
J8.	Which of the following choices best describes the main reason you breast-fed for less than 2 weeks? (SHOW CARD Z, READ CHOICES)	GO TO J12	CO TO 112	
	Insufficient milk 1 Painful nursing 2 Breast infection or mastitis 3 OTHER (SPECIFY) 8 DK 9		GO TO J12	GO TO J12
J9.	How old (was the baby / were the babies) when you started to regularly supplement your breast-feeding with formula, regular milk, or baby food?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J10.	How old (was the baby / were the babies) when you stopped breast-feeding altogether?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J11.	Which of the following choices best describes the main reason you stopped breast-feeding when you did? (SHOW CARD AA, READ CHOICES)			
	Normal weaning 1 Returned or started to work 2 Insufficient milk 3 Painful nursing 4 Breast infection or mastitis 5 OTHER (SPECIFY) 8 DK 9			
J12.	Did you receive any medication to stop milk production? IF YES:	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2
	J13. Was it in the form of a shot or a pill?	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9

'ASK J2 - J13 FOR EACH PREGNANCY BEFORE ASKING ABOUT NEXT PREGNANCY.

		7TH PREGNANCY	8TH PREGNANCY	9TH PREGNANCY
J2.	What was the outcome of your (first / next) pregnancy? (SHOW CARD BB, READ CHOICES)			
	Single live birth 2 Multiple live birth 3 Stillbirth 4 Miscarriage 5 Tubal or ectopic pregnancy 6 Induced abortion 7 Currently pregnant 1 OTHER (SPECIFY) 8 DK 9 IF CURRENTLY PREGNANT: SKIP TO J14			
J3.	How long did this pregnancy last?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J4.	During what month and year (was your baby born / did this pregnancy end)?	MO YR	MO YR	MO YR
	IF LIVE BIRTH OR STILLBIRTH, GO TO J6. OTHERWISE, GO TO J2 FOR THE NEXT PI			

		7TH PREG	8TH PREG	9TH PREG
J6.	Did you breast-feed (this baby / any of these babies)? IF YES:	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12
	J7. Did you breast-feed (this baby / any of these babies for(READ CHOICES)	1 GO TO J8	1 GO TO J8	1 GO TO J8
1	less than 2 weeks 1 2 weeks or longer 2	2 GO TO J9	2 GO TO J9	2 GO TO J9
J8.	Which of the following choices best describes the main reason you breast-fed for less than 2 weeks? (SHOW CARD CC, READ CHOICES)	GO TO J12	GO TO J12	GO TO J12
	Insufficient milk 1 Painful nursing 2 Breast infection or mastitis 3 OTHER (SPECIFY) 8 DK 9	<u></u>	·	<u> </u>
J9.	How old (was the baby / were the babies) when you started to regularly supplement your breast-feeding with formula, regular milk, or baby food?		WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J10.	How old (was the baby / were the babies) when you stopped breast-feeding altogether?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J11.	Which of the following choices best describes the main reason you stopped breast-feeding when you did? (SHOW CARD DD, READ CHOICES)			
	Normal weaning 1 Returned or started to work 2 Insufficient milk 3 Painful nursing 4 Breast infection or mastitis 5 OTHER (SPECIFY) 8 DK 9			
J12.	Did you receive any medication to stop milk production? IF YES:	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2
	J13. Was it in the form of a shot or a pill?	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9

CON	TINUATIOI	N PAGE USED:	YES NO	1 2
NUM	IBER OF CO	ONTINUATION PAGES USED		
J14.	menstrua Did you e	trol pills are taken for many reasons. These include to I periods, to prevent pregnancy, and for other health rever take birth control pills for any reason? (INCLUDE R BIRTH CONTROL IMPLANTS AND BIRTH CONTROL	easons.	
	v S	the control of the control of the material and the control of the	YES NO DK	1 2 GO TO K1. 9 GO TO K1.
	IF YES:			
	J15.	How old were you when you first took birth control	pills?	AGE
	J16.	Are you currently taking birth control pills?	YES NO	1 GO TO J18 .
		IF NO:		
		J17. How old were you when you last took birth co	entrol pills?	AGE
	J18.	In total, for how many months or years have you tall birth control pills? Do not include any months when not take them.	cen you did	
				MONTHS 1 YEARS 2 DK 9

SECTION K. MENSTRUAL HISTORY AND HORMONE USE

The next questions are about your menstrual periods and use of female hormones. How old were you when you had your first menstrual period? K1. AGE IF NEVER MENSTRUATED: RECORD 98 AND GO TO K5. K2. When did you have your last menstrual period? **MONTHS AGO** YEARS AGO AGE MONTH/YEAR Which of the following best describes your menstrual status in 19 (REFERENCE YEAR)? КЗ. (SHOW CARD EE, READ CHOICES) Still having periods 1 Still having periods but going through the change of life or menopause 2 Periods had stopped but started again because of hormone use 3 Completed menopause or change of life, periods stopped by themselves Periods stopped because of surgery or other medical treatment 5 OTHER (SPECIFY) DK 9

K4.	meno pills,	I have some questions about estrogens or progestins. The pausal symptoms such as hot flashes. These hormones meshots, skin patches, creams, or vaginal suppositories. The gen is Premarin. The most common type of progestin is Pr	ay have t most cor	peen in the form of
		you ever taken estrogens or progestins for any reason? D	o not incl	ude
	Dirth	control pills.	YES NO DK	1 2 GO TO K14. 9 GO TO K14.
	IF YE	<u>S</u> :		-
<i>;</i> .	K5.	Were you still having periods when you first took estrogens or progestins?	YES NO DK	1 GO TO K7. 2 9 GO TO K7.
		IF NO:		
		K6. When did you have your last menstrual period before beginning hormone use?	19	AGE MONTH/ YEAR
	K7.	How old were you when you <u>first</u> took estrogens or progestins?		AGE
	K8.	Are you currently taking estrogens or progestins?	YES NO	1 GO TO K10. 2
		IF NO:		٦
		K9. How old were you when you <u>last</u> took estrogens or progestins?		AGE
	K10.	In total, for how many months or years have you taken estrogens or progestins? Do not include any months who you did not take them.	Υ	IONTHS 1 EARS 2 K 9

<11.		stins are often taken together, some ever taken estrogen alone, that is, <u>w</u> e month or cycle?			
		•	YES	1	
			NO	2 GO TO K	(14.
			DK	9 GO TO K	(14.
	IF YES:				,
	K12. How old were you w	hen you first took estrogen alone?			
		•	: '	`	
				AGE	
		ny months or years did you take estr le any months when you did not tak	•		
	er e e e e e e e e e e e e e e e e e e				
				MONTHS	1
				YEARS	2
				DK	9

(14.	Have	you ever taken Tamoxifen or Nolvadex?	YES NO DK	1 2 GO TO L1. 9 GO TO L1.	
	<u>IF YE</u>	<u>§</u> :			
	K15.	How old were you when you <u>first</u> took Tamoxifen or Nolvadex?		AGE	
	K16.	Are you currently taking Tamoxifen or Nolvadex?	YES NO	1 GO TO K18. 2	
		IF NO: K17. How old were you when you last took Tamoxifen or Nolvadex?		AGE	
	K18.	In total, for how many months or years have you taken Tamoxifen or Nolvadex? Do not include any months when you did not take it.		MONTHS 1 YEARS 2 DK 9	2

SECTION L. MEDICAL HISTORY

L1.	Have you ever had a hysterectomy, the remove your uterus or womb?	at is, surgery to YES NO DK	2 GO TO L3.
	IF YES:		
	L2. How old were you when you ha	d the hysterectomy?	AGE
L3.	Have you ever had one or both of you	r ovaries completely removed?	·
·	to the second of	YES, ONE OVARY YES, BOTH OVAI NO DK	
	IF YES:		
	L4. How old were you when you ha removed?	d your (ovary / ovaries)	FIRST OVARY SECOND OVARY
			4
L5.	Have you ever had breast tissue removed disease such as a cyst or breast lump		5 1
	IF YES:		
	L6. How old were you when you ha	d this <u>first</u> done?	AGE

Now I will ask you about some medical conditions you may have had before 19___ (1 + REFERENCE YEAR).

L7. Has a doctor ever told you that you had (CONDITION) ? (SHOW CARD GG)			IF YES: L8. How old were you when the doctor first told you that you had (CONDITION)?
Epilepsy or epileptic seizures	YES NO DK	1 2 9	
Cirrhosis or other liver disease	YES NO DK	1 2 9	
Kidney disease	YES NO DK	1 2 9	
Parathyroid disease	YES NO DK	1 2 9	
Any type of thyroid disease or goiter	YES NO DK	1 2 9	
Cataracts	YES NO DK	1 2 9	
Skin cancer	YES NO DK	1 2 9	

L9.	Have you ever taken Dilantin or any other anti-seizure	YES	1
	medications for more than 6 months before	NO	2
	19 (1 + REFERENCE YEAR) ?	DK	9

L10.	Women receive radiation treatment to the chest for conditions such as tuberculosis, breast problems after childbirth, Hodgkin's disease, and other conditions. Before 19 (1 + REFERENCE YEAR) did you ever receive radiation treatment to the chest for a medical problem? Please do not include radiation treatment for breast cancer or chest x-rays.					
				YES	1	
				NO	2	GO TO M1.
			·	DK	9	GO TO M1.
	IF YES					
	L11.	L11. How old were you when you <u>first</u> received this treatment?				AGE
	L12.	For what disease or	condition did you recei	ive this treatment?		
			TUBERCULOSIS	•	1	
			BREAST PROBLEMS MASTITIS)	(POSTPARTUM	2	
			HODGKIN'S DISEAS	E	3	
			OTHER (SPECIFY)		8	i
		·	DK		9	

SECTION M.

The last questions are unrelated to health, but will help us evaluate the scientific methods we used in this study.

M1. Do you have an answering machine or voice mail?

ANSWERING MACHINE	1
VOICE MAIL	2 GO TO END
BOTH	. 3
NONE	4 GO TO END
DK	9

IF ANSWERING MACHINE:

M2. Would you say that you or other members of your household screen your calls.... (READ CHOICES)

Never or rarely	1
Sometimes	2
Most of the time	3
Always	4
DK	a

END:

These are all the questions I have for you. Is there anything else you would like to add or any questions you have for me?

Thank you for your participation in this research study.

Your cooperation, time and effort in this study will help increase the medical community's understanding and knowledge about women's health issues.

Presently there are several other epidemiologic studies being conducted in the Bay Area on breast health. If you are invited to participate, we hope you will be as generous with your time and interest on those research investigations as you have been with us. We (I) encourage you to participate, as your contribution can not be replaced by anyone else's, and the studies all focus on answering different questions.

My supervisor and/or I may contact you in the near future to clarify a question.

Thank you again. (OFFER BROCHURE)

TIME INTERVIEW COMPLETED:			AM	1
	HR	MIN	PM	2

INTERVIEWER ASSESSMENT

1. PARTICIPANT'S COOPERATION WAS	VERY GOOD		
	GOOD	2	
	FAIR	3	
	POOR	4	
2. THE OVERALL QUALITY OF THIS INTERVIEW IS	HIGH QUALITY	1	
	GENERALLY RELIABLE	2	
	QUESTIONABLE	3	
	UNSATISFACTORY	4	

HOW MUCH DIFFICULTY DID THE PARTICIPANT HAVE IN ANSWERING EACH OF THE FOLLOWING SECTIONS?	,	IF SOME OR A LOT, DESCRIBE
DEMOGRAPHICS AND CULTURAL BACKGROUND	NONE 1 A LITTLE 2 SOME 3 A LOT 4	·
PHYSICAL ACTIVITY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
SUNLIGHT EXPOSURE	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
DIET	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
VITAMINS	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
ANTHROPOMETRY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
RESIDENTIAL HISTORY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	

OCCUPATIONAL HISTORY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
PREGNANCY HISTORY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
MENSTRUAL HX, HORMONE USE & MEDICAL HX	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
3. WERE THERE ANY DISTRACTIONS	DURING THE INTERVIEW? YES	1 2
IF YES: DESCRIBE		
4. WAS A THIRD PERSON PRESENT D	URING THE INTERVIEW? YES	1 2
IF YES:		
5. WHO?	HUSBAND SON OR DAUGHTER OTHER RELATIVE OTHER (SPECIFY)	1 2 3 _
6. HOW MUCH DID THE THIRD	PERSON CONTRIBUTE TO THE INFORMATI	ON?
	NONE A LITTLE SOME	1 2 3